

AMENDMENTS TO THE CLAIMS:

The following listing of claims will replace all prior versions of claims in the application.

Listing Of Claims:

Claim 1 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) applying a polyisocyanate component to fertilizer particles to form isocyanate coated fertilizer particles,
- b) mixing an inert filler with said isocyanate coated fertilizer, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
- c) adding an isocyanate-reactive component to the mixture of step b), wherein said isocyanate-reactive component is selected from the group consisting of polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups,

and

- d) allowing the reactive components to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 2 (Original) The process of Claim 1 wherein steps a), b), c) and d) are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 3 (Currently Amended) The process of Claim 1, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~partilees~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 4 (Original) The process of Claim 1, wherein said ratio is from about 80:30 to about 30:70.

Claim 5 (Original) The process of Claim 4, wherein said ratio is from about 60:40 to about 40:60.

Claim 6 (Cancelled)

Claim 7 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) applying a polyisocyanate component to fertilizer particles to form coated fertilizer particles,
- b) adding an isocyanate-reactive component to said coated fertilizer particles, wherein said isocyanate-reactive component is selected from the group consisting of polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups,
- c) mixing an inert inorganic filler with the mixture of step b) before the isocyanate and isocyanate-reactive component react, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
and
- d) allowing the reactive components to react to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso

that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 8 (Original) The process of Claim 7 wherein steps a), b), c) and d) are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 9 (Currently Amended) The process of Claim 7, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~particles~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 10 (Original) The process of Claim 7, wherein said ratio is from about 80:30 to about 30:70.

Claim 11 (Original) The process of Claim 10, wherein said ratio is from about 60:40 to about 40:60.

Claim 12 (Cancelled)

Claim 13 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) mixing fertilizer particles with an inert inorganic filler, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
- b) applying a polyisocyanate component to the mixture to form a mixture of coated fertilizer particles and coated inert filler,
- c) adding an isocyanate-reactive component to the resultant mixture, wherein said isocyanate-reactive component is selected from the group consisting of

polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups.

and

- d) allowing the reactive components to react to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 14 (Original) The process of Claim 13 wherein steps a), b), c) and d), are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 15 (Currently Amended) The process of Claim 13, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~partilees~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 16 (Original) The process of Claim 13, wherein said ratio is from about 80:30 to about 30:70.

Claim 17 (Original) The process of Claim 16, wherein said ratio is from about 60:40 to about 40:60.

Claim 18 (Cancelled)

Claim 19 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) applying an isocyanate reactive component to fertilizer particles to form coated fertilizer particles, wherein said isocyanate-reactive component is selected from the group consisting of polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups,
- b) mixing an inert inorganic filler with said coated fertilizer particles, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
- c) adding a polyisocyanate component to the mixture of step b) and
- d) allowing the reactive components to react to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 20 (Original) The process of Claim 19 wherein steps a), b), c) and d) are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 21 (Currently Amended) The process of Claim 19, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~particles~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 22 (Original) The process of Claim 19, wherein said ratio is from about 80:30 to about 30:70.

Claim 23 (Original) The process of Claim 22, wherein said ratio is from about 60:40 to about 40:60.

Claim 24 (Cancelled)

Claim 25 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) applying an isocyanate reactive component to fertilizer particles to form coated fertilizer particles, wherein said isocyanate-reactive component is selected from the group consisting of polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups,
 - b) adding a polyisocyanate to said coated fertilizer,
 - c) mixing an inert inorganic filler with the mixture of step b) before the isocyanate and isocyanate-reactive component react, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
- and
- d) allowing the reactive components to react to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 26 (Original) The process of Claim 25 wherein steps a), b), c) and d) are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being

substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 27 (Currently Amended) The process of Claim 25, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~particles~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 28 (Original) The process of Claim 25, wherein said ratio is from about 80:30 to about 30:70.

Claim 29 (Original) The process of Claim 28, wherein said ratio is from about 60:40 to about 40:60.

Claim 30 (Cancelled)

Claim 31 (Currently Amended) A process for producing polyurethane(urea) encapsulated, slow release fertilizer particles comprising:

- a) mixing fertilizer particles with an inert inorganic filler, wherein said inert, inorganic filler is insoluble or substantially insoluble in water and contains at least 50% by weight of particles having a particle size of less than 100 microns,
- b) applying an isocyanate reactive component to the mixture to form a mixture of coated fertilizer particles and coated inert filler, wherein said isocyanate-reactive component is selected from the group consisting of polyether polyols having an equivalent weight of less than 200 and a functionality of 2 to 8 and compounds having a molecular weight of from 105 to 400 and an equivalent weight of from about 31 to less than about 100 and containing from 2 to 4 hydroxyl groups,
- c) adding a polyisocyanate component to the resultant mixture and
- d) allowing the reactive components to react to form filler containing polyurethane(urea) encapsulated fertilizer particles containing from about 1 to

about 15 percent by weight of filled polyurethane(urea), said percent by weight based on the total weight of the encapsulated fertilizer, with the proviso that the weight ratio of polyurethane(urea) to filler is from about 80:20 to about 30:70.

Claim 32 (Original) The process of Claim 31 wherein steps a), b), c) and d) are repeated (successively) as many times as necessary, with the polyurethane(urea) encapsulated fertilizer particles from the previous step d) being substituted for the fertilizer particles in step a), so as to form polyurethane(urea) encapsulated fertilizer particles containing from about 1 to about 15 % by weight of filled polyurethane(urea) based on the total weight of the encapsulated fertilizer.

Claim 33 (Currently Amended) The process of Claim 31, wherein said filler containing polyurethane(urea) encapsulated fertilizer ~~partilees~~ particles contain from about 4 to about 12% by weight of filled polyurethane(urea).

Claim 34 (Original) The process of Claim 31, wherein said ratio is from about 80:30 to about 30:70.

Claim 35 (Original) The process of Claim 34, wherein said ratio is from about 60:40 to about 40:60.

Claim 36 (Cancelled)